

**CLAIMS**

1. An optical pickup head device comprising:
  - a light source which can emit a linear polarized light with phase angle;
  - a polarized beam splitter which reflects the linear polarized light and passes through the signal polarized light;
  - an objective lens unit which focuses the light from polarized beam splitter to optical disk; and
  - a photodetector which detects the signal of polarized light.
2. The optical pickup head device as claimed in claim 1, wherein the collimator corrects the polarization light to parallel light.
3. The optical pickup head device as claimed in claim 1, wherein the light source is laser diode.
4. The optical pickup head device as claimed in claim 1, wherein the polarized beam splitter can reflect the polarized light to circular polarized light.
5. The optical pickup head device as claimed in claim 4, wherein circular polarized light is a right-hand circular polarized light.
6. The optical pickup head device as claimed in claim 1, wherein the polarized light with signal is a left-hand circular polarized light.

10050002PA-US

7. The optical pickup head device as claimed in claim 1, wherein the phase angel is 45 degree.

8. The optical pickup head device as claimed in claim 1, wherein the polarized beam splitter produces the -45 degree phase angle. The feedback polarized light with -45 degree phase angle going to light source has a phase shift 90 degree compared with original linear polarized light.

9. An optical pickup head device comprising:

a laser diode which emits linear polarized light with the 45 degree phase angle;

a polarized beam light which reflects the original linear polarized light to right-hand circular polarized light and passes through the left-hand circular polarized light;

a collimator which corrects the right-hand circular polarized light to parallel light;

an objective lens which focuses the right-hand circular polarized light to optical disk which reflected by optical disk in which reflected light is a left-hand circular polarized light; and

a photodetector which detects the signal with polarized light.

10. The optical pickup head device as claimed in claim 9, wherein the polarized beam splitter can produce -45 degree phase angle. The feedback polarized light with -45 degree phase angle going to light source has a phase shift 90 degree compared with original linear polarized light.